

specimen of a Goshawk which is undoubtedly new to science, and which I propose to name as undermentioned:

ASTUR MEYERIANUS, sp. n. (Plate XXII.)

a. Niger, subtus albus; similis *A. albigulari*, sed major et genis albis nigro striolatis distinguendus.

This species, which is from Ansum on the Island of Jobi, is very closely allied to *A. albigularis* of the Solomon Islands; but is a larger bird, as will be seen by the following measurements:—

	Total length. millim.	Wing. millim.	Tail. millim.	Tarsus. millim.
<i>a. A. albigularis</i> (type)...	460	254	203	67
<i>b. A. Meyerianus</i> (type)...	510	315	205	72

In addition to the larger size and white cheeks, the Jobi bird is slightly varied with black shaft-streaks and wavy cross bars of blackish; but whether these are signs of youth or indications of specific characters, I am unable to determine.

Descriptions of Genera and Species of Australian Phytophagous Beetles. By JOSEPH S. BALY, Esq., M.R.C.S., F.L.S.

[Read June 21, 1877.]

List of Genera and Species.

<i>Idiocephala nigripennis.</i>	<i>Ditropidus serenus.</i>
<i>Rhombosternus sulphuripennis.</i>	<i>Terillus foveolatus.</i>
— <i>antennatus.</i>	— <i>squamosus.</i>
— <i>gracilicornis.</i>	— <i>perplexus.</i>
<i>Bucharis Chapuisii.</i>	— <i>Duboulayi.</i>
— <i>granulosus.</i>	— <i>vittatus.</i>
— <i>martius.</i>	<i>Geloptera igneo-nitens.</i>
<i>Polyachus marginicollis.</i>	— <i>vestita.</i>
<i>Ditropidus phalacroides.</i>	<i>Rhyparida maculicollis.</i>
— <i>lætus.</i>	<i>Cyclonoda</i> , n. g.
— <i>costipennis.</i>	<i>Paralepta</i> , n. g., <i>foveicollis.</i>
— <i>facialis.</i>	<i>Platycephala</i> , n. g., <i>eximia.</i>
— <i>Jansonii.</i>	<i>Arsipoda picipes.</i>
— <i>semicircularis.</i>	<i>Ædionychis Howittii.</i>
— <i>ornatus.</i>	<i>Sphærophyma</i> , n. g., <i>Simoni.</i>
— <i>pulchellus.</i>	

Family CRYPTOCEPHALIDÆ.

Genus IDIOCEPHALA, *Saunders*.

IDIOCEPHALA NIGRIPENNIS. Subquadrato-oblonga, valde convexa, rufo-fulva, nitida; antennis (basi exceptis) elytrisq; nigris; thorace basi utrinque oblique impresso, medioeriter et remote punctato; elytris fortiter seriatim punctatis, interspatiis ante medium et ad latera transversim elevato-strigosis. ♀. Long. 2 lin.

Hab. Queensland, Rockhampton.

Head scarcely broader than long, subrotundate, closely punctured, interspaces finely rugose-strigose; vertex and front with an ill-defined raised longitudinal line; eyes moderately distant, deeply notched; antennæ more than half the length of the body, slightly thickened towards the apex, black, four lower joints rufo-fulvous, more or less stained with piceous. Thorax twice as broad as long; sides broadly margined, subparallel at the base, thence obliquely converging to the apex, more quickly converging and slightly rounded near the latter; above convex, broadly and obliquely depressed on either side, smooth and shining, remotely punctured; the broadly reflexed lateral margin paler than the disk. Scutellum wedge-shaped, its apex truncate. Elytra not broader than the base of the thorax; sides strongly lobed, constricted behind the middle; above convex, rather strongly punctate-striate, interspaces on the anterior disk and on the sides transversely wrinkled. Body beneath closely punctured. Prosternum oblong, its hinder apex truncate, its surface plane, the anterior border scarcely deflexed.

Genus RHOMBOSTERNUS, *Suffr.*

RHOMBOSTERNUS SULPHURIPENNIS, *Suffr.* MS. Elongatus ♂, magis oblongus ♀, subcylindricus, flavus, nitidus; vertice, thoracis margine basali, scutello, tibiis apice tarsisque nigris; thorace hic illic fortiter punctato; elytris fortiter punctatis, punctis apicem versus striatim dispositis; interspatiis transversim elevato-reticulatis, inter strias longitudinaliter convexiusculis; suturâ, fasciâ basali alterâque pone medium undatâ, nigris.

Mas abdominis segmento ultimo apice trilobato, dorso foveâ magnâ subrotundatâ leviter impresso, et utrinque prope apicem spinâ compressâ acutâ, deorsum spectante, instructo.

Var. A. scutello flavo, nigro-limbato. Long. 3-3¼ lin.

Hab. South Australia, Adelaide.

Head rotundate; vertex and front coarsely punctured, the former, together with the upper portion of the latter, rugose; antennæ longer than the body in both sexes, slender, filiform, piceo-fulvous, the basal joint stained above with piceous, the third and fourth equal in length, the fifth and following joints each rather longer than the fourth, nearly equal; eyes deeply and narrowly notched. Thorax twice as broad as long at the base; sides rather broadly margined, subparallel and slightly rounded at the base, obliquely converging from behind the middle to the apex, all the angles acute; basal margin slightly bisinuate on either side, the median lobe broadly truncate; upper surface convex, subcylindrical in front, impressed here and there with rather coarse punctures. Scutellum wedge-shaped, its apex broadly truncate. Elytra not broader than the base of the thorax, oblong; sides parallel, moderately lobed at the base; above convex, abruptly elevated round the scutellum, coarsely punctured, the punctures piceous, placed irregularly on the anterior half of the disk, irregularly arranged in longitudinal rows on the hinder half; interspaces coarsely transversely wrinkled, those between the longitudinal striæ slightly convex.

RHOMBOSTERNUS ANTENNATUS. *Elongatus, angustatus, subcylindricus, piceo-fulvus, nitidus, subtus (pedibus epipleuris que exceptis) flavus; thorace sat fortiter, subcrebre punctato; elytris subfortiter, confuse punctatis, punctis ad apicem striatim dispositis; interspatiis leviter transversim rugulosis, apicem versus prope suturam longitudinaliter convexiusculis.* ♀. Long. $2\frac{1}{4}$ lin.

Hab. North-western Australia.

Head rotundate; vertex and front rather closely punctured; the latter impressed between the upper portion of the eyes with a faint longitudinal groove; antennæ very slender, filiform, longer than the body, third and following joints elongate, the fourth shorter than either the third or fifth; eyes deeply notched. Thorax twice as broad as long; sides distinctly margined, rounded and converging from base to apex; hinder angles acute, the anterior armed with a small lateral tooth; basal margin slightly concave on either side, its median lobe biemarginate; upper surface convex, not obliquely depressed on either side, coarsely but not very deeply punctured, interspaces very smooth and shining; basal margin narrowly edged with piceous. Scutellum

subquadrate, its apex obtusely rounded. Elytra not broader than the thorax, parallel, sides slightly lobed at the base; above convex, slightly thickened near the scutellum, rather strongly punctured, the punctures arranged towards the apex in ill-defined longitudinal rows; interspaces transversely wrinkled, those near the apex longitudinally thickened. Prosternum narrow in front, concave on the sides, dilated posteriorly, the hinder apex obtusely angled.

RHOMBOSTERNUS GRACILICORNIS. Elongatus, subcylindricus, flavus, nitidus; supra pallide piceus, thoracis marginibus scutelloque flavis; antennis gracillimis, corpore multo longioribus; thorace rugoso-punctato, disco plagâ nigrâ, antice bifurcatâ, ornato; elytris rude punctatis, punctis pone medium striatim dispositis; interspatiis crasse transversim reticulatis, inter strias longitudinaliter costatis. ♀. Long. 3 lin.

Fœm. thoracis plagâ nigrâ obsoletâ.

Hab. Western Australia.

Head rotundate, rugose; eyes deeply notched; antennæ very slender, much longer than the body, the basal joint thickened, the second very short, the third and following ones elongate, the fourth rather shorter than either the third or fifth, these latter equal. Thorax more than twice as broad as long; sides broadly margined, rounded, converging towards the apex, the anterior angle armed with a short subacute lateral tooth; basal margin slightly oblique and faintly bisinuate on either side, median lobe broad, slightly concave; above convex, obliquely depressed on either side behind the middle; the surface in front of the median lobe, together with the lobe itself, also depressed; surface coarsely rugose-punctate; the reflexed lateral border, a narrow line on the apical margin, and another less defined bordering the base pale yellow; at the base, just in front of the median lobe, is a small piceous patch. Scutellum broadly wedge-shaped (rather narrower in the male), its apex broadly and obtusely rounded, its basal margin narrowly edged with black; surface plane, impunctate. Elytra scarcely broader than the thorax, oblong, the sides parallel, moderately lobed, the lateral margin reflexed; above convex, thickened near the scutellum, very coarsely punctured; interspaces strongly and transversely reticulate, longitudinally costate near the apex and on the extreme lateral margin. Prosternum much longer than broad in the male, rather broader in the

female, concavely excavated on the sides, dilated posteriorly, its hinder apex obtusely angulate, its surface transversely convex.

Genus *BUCHARIS*, *Baly*.

BUCHARIS CHAPUISII. Breviter ovatus, pube adpressâ griseâ vestitus, supra cupreus, subtus obscure æneo-niger; labro, antennarum articulis quinque basalibus, femoribus anticis, tibiis anticis (basi exceptis) femoribusque intermediis basi et subtus fulvis; thorace sat fortiter punctato, interstitiis minute granulosis; elytris glabris, distincte punctato-striatis; interspatiis minute et irregulariter strigosis planis, externis convexis. Long. 1-1½ lin.

Hab. South Australia (Gawler Town, collected by Mr. Odewahn).

Eyes large, deeply notched, moderately distant in the female, more closely approximating in the male, front between the eyes longitudinally sulcate; five outer joints of antennæ black or nigro-piceous. Thorax twice as broad as long at the base, sides rounded and converging from base to apex; basal margin bisinuate on either side, basal lobe entire, subacute, covering the base of the scutellum; upper surface sparingly clothed with adpressed griseous hairs; distinctly but not very closely punctured, the punctures oblong; interspaces (seen under a lens) very finely granulo-punctate. Scutellum oblong, its apex subacute. Elytra glabrous, finely but distinctly punctate-striate; interspaces finely and irregularly strigose, plane, two outer ones convex. Pygidium rugose, densely clothed with adpressed hairs.

BUCHARIS GRANULOSUS. Oblongus, supra cupreus, subopacus; labro, mandibulis antennisque basi fulvis, his extrorsum nigropiceis; subtus nigro-æneus, nitidus, pedibus cupreis; thorace granuloso, sat crebre punctato, pube adpressâ griseâ vestito; elytris granuloso-strigosis, distincte punctato-striatis, interspatiis planis, externis convexiusculis. Long. 1½ lin.

Hab. Western Australia, Champion Bay.

Head clothed with adpressed whitish hairs, granulo-punctate, face impressed with a longitudinal groove between the eyes, the latter moderately distant; seven lower joints of antennæ fulvous, the rest pitchy black. Thorax twice as broad as long at the base; sides obliquely converging and moderately rounded from base to apex; basal lobe slightly reflexed, its apex obtuse; upper surface sparingly clothed with adpressed hairs, minutely granulo-punctate, rather closely covered with deeply-impressed

oblong punctures. Scutellum oblong, its apex obtuse; surface shining, impunctate. Elytra as broad at the base as the thorax, slightly narrowed towards the apex; above convex, closely granulose-strigose, opaque, the suture and the lateral margin smooth and shining; surface regularly and distinctly punctate-striate; interspaces plane, those on the outer disk moderately convex. Under surface nitidous, clothed with adpressed white hairs, front surface of anterior thighs rufo-piceous.

BUCHARIS MARTIUS. *Ditropidus martius*, Suffr. MS. Oblongus, niger, nitidus; pedibus, capite (antennis extrorsum oculisque exceptis) thoraceque rufis, hoc convexo, fere impunctato; elytris tenuiter punctato-striatis, striis prope marginem anteriorem magis fortiter impressis, interspatiis planis, externis convexis. Long. 1 lin.

Hab. Moreton Bay.

Face faintly rugose-punctate; eyes black, remote; clypeus short, transverse, separated from the face by an indistinct transverse groove; labrum large, its anterior border obsoletely emarginate; jaws prominent, stained with piceous; five lower joints of antennæ obscure fulvous, the rest nigro-piceous. Thorax very convex, smooth and shining, nearly impunctate, only a few fine punctures being visible under a strong lens; basal lobe strongly produced, its apex entire, obtuse, covering the base of the scutellum. Elytra regularly punctate-striate, interspaces plane, those on the outer border convex. Metasternum, together with the apex of the abdomen, stained with rufo-piceous, lateral margin of prosternum piceous.

Genus POLYACHUS, *Chapuis*.

POLYACHUS MARGINICOLLIS. Anguste oblongus, obscure fulvus, nitidus; supra cupreo-æneus; clypeo, labro antennisque basi fulvis, his extrorsum nigris; thorace fortiter punctato, utrinque ante basin oblique excavato, lateribus fulvis; elytris sordide fulvis, punctato-striatis, interspatiis fere planis, ad apicem et prope marginem anteriorem convexiusculis; subtus niger, tibiis, tarsis femoribusque anticis quatuor fulvis. Long. 1 lin.

Hab. Western Australia, Swan River.

Head minutely granulose; eyes distant; antennæ with the four lower joints obscure fulvous, the following three nigro-piceous, the four upper ones black. Thorax twice as broad at

the base as long, sides rounded, moderately converging from base to apex; basal lobe obtuse, its extreme apex recurved; upper surface obliquely depressed on outer side just before the base, strongly and rather closely punctured, interspaces minutely granulose-punctate; lateral margin broadly edged with obscure fulvous. Elytra oblong, scarcely broader than the thorax, fulvous, suture narrowly edged with piceous; surface distinctly punctate-striate, interspaces faintly wrinkled, nearly plane, slightly convex towards the apex and on the outer side. Beneath black, clothed with coarse, adpressed white hairs; tibiæ, tarsi, and four anterior thighs, together with the apices of the hinder pair, obscure fulvous.

Genus *DITROPIDUS*, *Erichs.*

DITROPIDUS PHALACROIDES. Rotundato-ovatus, postice paulo attenuatus, valde convexus, niger, nitidus, supra (antennis exceptis) obscure nigro-æneus; capite thoraceque granulosis, hoc parce tenuiter aciculato-punctato; elytris tenuiter punctato-striatis, punctis aciculatis, interspatiis planis, iis ad latera convexiusculis. Long. $\frac{1}{2}$ - $\frac{2}{3}$ lin.

Hab. South Australia, Gawler Town.

Vertex and front plane, sparingly clothed with short silvery hairs, very finely granulose, impressed with a few minute punctures, visible only under a strong lens; eyes moderately distant, angularly notched; antennæ shorter than the head and thorax, the basal joint obscure rufous, the rest shining black; five outer joints broader than long, forming a distinct club; third to the sixth short, cylindrical. Thorax nearly three times as broad as long at the base; sides quickly converging and slightly rounded from base to apex, the hinder angle produced posteriorly, acute; upper surface minutely granulose, rather sparingly impressed with very fine aciculate punctures. Scutellum narrowly wedge-shaped. Elytra very finely punctate-striate, the punctures aciculate; interspaces plane, each impressed with an irregular row of very minute punctures, two outer interspaces slightly convex.

DITROPIDUS LÆTUS. Anguste oblongo-ovatus, convexus, cupreus, nitidus, subtus obscure nigro-æneus; labro, pedibus antennisque fulvis, his extrorsum nigris; thorace subremote punctato; elytris sat fortiter punctato-striatis, punctis oblongis; interspatiis ad apicem convexiusculis, externis convexis. Long. $\frac{3}{4}$ lin.

Hab. South Australia.

Vertex and front clothed with scattered whitish hairs, sparingly but distinctly punctured, the latter impressed with a longitudinal groove; clypeus transverse, semilunate, its anterior margin concave, its surface irregular, deeply but remotely punctured; eyes moderately distant, slightly notched; antennæ rather longer than the head and thorax, five outer joints moderately dilated, not longer than broad, black, the six lower ones obscure fulvous. Thorax about twice as broad as long at the base; sides rounded and converging from base to apex, more quickly converging in front; surface subremotely punctured, the punctures oblong, coarse and strongly impressed on the sides, finer on the disk; interspaces near the lateral margin faintly strigose. Scutellum ovate, its apex acute. Elytra oblong, strongly punctate-striate, punctures oblong; interspaces plane, slightly convex towards the apex, those on the outer side convex for their whole length. Body beneath clothed with whitish hairs.

DITROPIDUS COSTIPENNIS. Breviter ovatus, niger, nitidus; labro antennarumque basi piceis; thorace fortiter punctato, interstitiis strigosis; elytris infra basin transversim excavatis, sat profunde punctato-striatis, interspatiis nitidis, pone medium obsolete transversim striolatis, convexis, ad apicem et ad marginem exteriorem costatis. Long. 2 lin.

Hab. Western Australia, Champion Bay.

Head finely punctured, subopake, space between the eyes broad, faintly impressed in the middle with a longitudinal groove; six lower joints of antennæ obscure piceo-fulvous, the upper surface of the basal joint, together with nearly the whole of the sixth, stained with piceous, seventh to the eleventh black; labrum and mandibles piceous, base of the latter rufous. Thorax convex; sides rounded and converging from base to apex; basal border bisinuate on either side, basal lobe slightly reflexed, its extreme apex narrowly but distinctly notched; upper surface convex, impressed just in front of the basal lobe with a short transverse excavation; strongly and rather closely punctured, punctures oblong, interspaces strigose; strigæ crowded at the sides, less visible and sometimes nearly obsolete on the middle disk. Elytra transversely excavated below the basilar space (the latter slightly elevated), strongly and deeply punctate-striate, the striæ sulcate; interspaces thickened, convex, costate towards the apex and on the outer disk.

DITROPIDUS FACIALIS. Breviter ovatus, niger, nitidus; labro, pedibus antennisque fulvis, his apice fuscis, femoribus posticis piceis; thorace tenuiter, subremote punctato; elytris tenuiter sed distincte punctato-striatis, interspatiis impunctatis, planis, iis ad marginem anteriorem leviter convexiusculis.

Mas facie testaceâ, vertice nigro-piceo.

Fœm facie nigro-piceâ, clypeo maculâque frontali testaceis. Long. 1 lin.

Hab. South Australia, Gawler Town.

Head slightly convex, smooth, impressed with shallow punctures, sparingly clothed with fine adpressed hairs; eyes large, widely separated in the female, rather more approximate in the male; four outer joints of antennæ more or less stained with fuscous. Thorax twice as broad as long; sides rounded and converging from base to apex; upper surface minutely and subremotely punctured. Elytra finely punctate-striate, interspaces plane, smooth and impunctate, those on the outer margin very faintly convex. Beneath black, sparingly clothed with adpressed hairs; a patch on either side of the anterior margin of the mesosternum fulvous. Legs in the female stained with piceous.

DITROPIDUS JANSONI. Breviter ovatus, niger, nitidus; labro antennarumque basi fulvis, pedibus elytrisque chalybeis, his sat fortiter punctato-striatis, interspatiis planis, externis convexis; capite æneo, thorace nigro-æneo, sat crebre punctato.

Mas oculis approximatis, fronte angustissimo. Long. 1½ lin.

Hab. Queensland, Rockhampton.

Head clothed with adpressed whitish hairs, brassy green; labrum and four lower joints of antennæ fulvous, the remaining joints black; eyes large, occupying nearly the whole front in the male, the space between them in that sex being almost linear; more distantly placed in the female; clypeus rugose-punctate. Thorax convex, nigro-æneous, rather coarsely and rather closely punctured. Scutellum hastate. Elytra rather strongly punctate-striate, interspaces plane, remotely impressed with fine punctures, those on the outer margin convex.

DITROPIDUS SEMICIRCULARIS, *Suffr.* MS. Breviter ovatus, cæruleo-niger, nitidus, griseo-sericeus; labro fulvo, clypei margine anteo antennisque rufo-piceis, his apice infuscat; thorace æneo vix micante, subcrebre punctato; elytris distincte punctato-striatis

interspatiis suberebro punctatis, internis ad apicem, externis totis convexiusculis; chalybeis, utrinque fasciâ latâ curvatâ prope medium positâ, antrorsum ramulos duos emittente, fulvâ; femoribus anticis basi tarsisque piceis. Long. 2 lin.

Hab. Australia.

Head finely but not closely punctured, front broad, longitudinally depressed between the eyes, the latter widely separated; antennæ shorter than the head and thorax, rufo-piceous, stained on the outer half with fuscous; clypeus obliquely deflexed, faintly rugose, the anterior margin rufo-piceous. Thorax clothed with adpressed whitish-coloured silky hairs, distinctly and rather closely punctured; basal lobe obliquely depressed on either side along the basal margin, the space between the two depressions forming a narrow longitudinal ridge, which extends posteriorly to the apex of the lobe. Scutellum glabrous. Elytra clothed with sericeous hairs, rather finer and less abundant than those on the thorax, firmly but distinctly punctate-striate.

DITROPIDUS ORNATUS. Breviter ovatus, niger, nitidus; labro antennisque basi obscure fulvis; thorace fortiter punctato; elytris tenuiter punctato-striatis, flavis, utrinque vittâ suturali, margine exteriori, antice obsoletâ, plagâ transversâ basi ad fixâ alteraque trigonatâ pone medium positâ, sæpe ad suturam connexâ, nigris. Long. $1\frac{3}{4}$ – $2\frac{1}{4}$ lin.

Hab. Western Australia.

Head clothed with adpressed whitish hairs, strongly punctured, face between the eyes concave, impressed with a faint longitudinal groove; eyes moderately distant in the male, more widely separated in the female; five lower joints obscure fulvous, more or less stained above with piceous, sixth joint entirely piceous, the rest black. Thorax convex; sides rounded and converging from base to apex, anterior angles slightly produced, acute; basal margin bisinuate on either side, basal lobe very slightly deflexed; surface smooth and shining, coarsely but not very closely punctured, punctures oblong. Scutellum ovate, its apex acute. Elytra very finely punctate-striate, punctures piceous, those on the striæ near the outer margin more strongly impressed; interspaces plane, smooth, impunctate, very slightly convex on the outer disk; bright flavous, a sutural vitta, dilated in the middle, the outer border from below the lateral lobe to the apex, a transverse patch on the middle of the basal margin, the margin itself between the patch

and the suture, and lastly a triangular patch just below the middle of the disk, usually attached to the sutural vitta, black. Front anterior thighs in the male with a piceous patch.

DITROPIDUS PULCHELLUS. Breviter ovatus, niger, nitidus; capite thoraceque rufo-fulvis, illo oculis, vertice utrinque antennisque extrorsum nigris; hoc sat fortiter punctato, margine basali nigro; elytris distincte punctato-striatis, interspatiis planis, externis vix convexiusculis; utrinque fasciâ transversâ ante medium intus abbreviatâ, extus ramulum fere ad basin emittente maculâque semilunatâ ante apicem positâ, læte fulvis ornatis. Long. 2 lin.

Hab. South Australia, Adelaide.

Head distinctly punctured; jaws, eyes, and an oblique patch on either side of the vertex black; face excavated between the eyes, the latter widely separated; five lower joints of antennæ fulvous, the rest piceous. Thorax nitidous, bright rufo-fulvous, the basal margin edged with black; surface rather coarsely but not closely punctured. Elytra distinctly but not strongly punctate-striate; interspaces plane, impunctate, very faintly wrinkled, those on the outer margin very slightly convex; third stria from the suture sulcate towards the apex; extreme apex of elytra coarsely punctured; each elytron with a transverse band, abbreviated at the suture, irregularly sinuate on both its anterior and posterior borders, the outer portion of the former dilated and produced upwards along the outer border of the elytron nearly to the base, and lastly a semilunate subapical patch, fulvous. Beneath black, the prothorax, together with the basal portion of the anterior pair of thighs, fulvous.

DITROPIDUS SERENUS. Breviter ovatus, postice attenuatus, convexus, fulvo-piceus, nitidus, antennis pedibusque pallidioribus; pectore, abdomine, scutello, thoracis margine basali elytrorumque lineâ suturali nigris; thorace lævi; elytris tenuiter punctato-striatis, striis ad marginem lateralem magis fortiter punctatis, leviter sulcatis; interspatiis planis, lævibus, iis ad latera convexiusculis. Long. $1\frac{2}{3}$ lin.

Hab. South Australia.

Vertex and front smooth, subremotely but not deeply punctured; eyes large, black, broadly separated in the female, less distant in the other sex: antennæ slender, rather longer than the head and thorax, five outer joints compressed and slightly dilated, third, fourth, and fifth equal in length. Thorax twice as broad at

the base as long; sides rounded and converging from base to apex, hinder angles produced posteriorly, acute; basal margin bisinuate on either side, median lobe acute, its apex finely notched; above convex, smooth and shining, rather remotely impressed with minute punctures only visible under a lens. Scutellum ovate, acuminate at base and apex. Elytra finely punctate-striate, the striæ on the outer margin rather more strongly punctured and slightly sulcate; interspaces plane, impunctate, those on the outer margin convex. Pygidium rugose-punctate, sparingly clothed with adpressed hairs. Prosternum rather longer than broad in the male; in the female slightly transverse.

Family EUMOLPIDÆ.

Genus TERILLUS, *Chap.*

TERILLUS FOVEOLATUS. Elongatus, convexus, cupreus, nitidus; pedibus antennisque fulvis, harum articulo ultimo nigro, labro flavo; capite thoraceque crebre punctatis; elytris oblongis, convexis, foveis magnis numerosis, seriatim dispositis, leviter impressis, fundo rugoso-punctatis et parce sericeis, instructis; interspatiis nitidis, hic illic inter se reticulatis, ad apicem costatis. Long. $3\frac{1}{2}$ lin.

Hab. Western Australia; a single specimen in my cabinet, collected by Mr. Duboulay.

Head closely rugose-punctate; clypeus not separated from the upper face, its anterior border narrowly edged with metallic green, bidentate; labrum and jaws pale yellow; antennæ nearly three fourths the length of the body, slender, filiform, fulvous, the apical joint black. Thorax twice as broad as long; sides rounded and converging from base to apex; above subcylindrical, closely rugose-punctate. Scutellum broader than long, sides diverging from the base towards the apex, the latter obtusely angulate; surface closely punctured. Elytra oblong, slightly attenuated at the apex, convex, covered with large shallow foveæ, arranged on each elytron in ten longitudinal rows; surfaces of these foveæ rugose-punctate and sparingly clothed with scale-like sericeous hairs; towards the apex of the elytra and on the extreme lateral border the foveæ forming each row are more or less confluent, and run into distinct longitudinal grooves; interspaces nitidous, coarsely wrinkled and irregularly reticulating on the anterior two thirds of the disk; on the hinder third and on the outer border they form longitudinal costæ.

TERILLUS SQUAMOSUS. Elongatus, cylindricus, niger, nitidus, dense albido squamosus; labro antennisque piceo-fulvis, his extorsum, tibiis tarsisque anticis piceis; thorace subremote punctato; elytris sat fortiter punctatis, interspatiis transversim rugulosis. Long. $3\frac{1}{2}$ lin.

Hab. Western Australia, Nichol Bay.

Body densely clothed with adpressed white scales. Head rather strongly but not very closely punctured, clothed with long slender adpressed white scales; eyes prominent, rotundate-ovate, slightly sinuate; antennæ slender, more than half the length of the body, second joint short, obovate, the third and fourth each twice as long as the second, equal, the fifth and sixth rather longer, also equal. Thorax twice as broad as long; sides rounded and diverging at the base, thence obliquely converging to the apex, slightly sinuate just behind the middle; above subcylindrical, excavated on the basal margin just in front of the scutellum, impressed, but not very closely, with deep round punctures, clothed with similar scales to those on the head. Scutellum broader than long, its apex broadly rounded. Elytra broader than the thorax, parallel, subacutely rounded at the apex, dehiscent at the sutural angle; above cylindrical, coarsely punctured, the interspaces transversely rugulose; surface clothed with elongate-ovate, very acuminate scales; besides these, scattered here and there, are a few very long, slender, thread-like, erect hairs. Body beneath and legs densely clothed with linear scales.

TERILLUS PERPLEXUS. Elongatus, subcylindricus, pube adpressâ squameiformi albidâ dense vestitus; subtus piceus, pedibus abdomineque pallidioribus; supra cupreus, labro antennisque fulvis, harum articulis ultimis apice infuscatis; thorace tenuiter, subremote punctato; elytris subcrebre punctatis, interspatiis transversim rugulosis. Long. $2\frac{1}{2}$ lin.

Hab. Western Australia, Nichol Bay.

Body densely clothed with linear, adpressed, scale-like hairs. Head exerted, vertex and front remotely and finely punctured, impressed in the middle with a shallow longitudinal groove; clypeus rather more strongly punctured than the upper face; antennæ more than half the length of the body, slender, entirely filiform, fulvous, the apices of the five or six outer joints stained with fuscous; eyes ovate-rotundate, entire. Thorax twice as broad as long; sides regularly rounded; above convex, nitidous,

finely and remotely punctured. Scutellum transverse its apex broadly and obtusely rounded. Elytra broader than the thorax, oblong, parallel; above convex, rather closely punctured, interspaces transversely rugulose.

TERILLUS DUBOULAYI. Subelongatus, subcylindricus, obscure æneus, dense albido-squamosus; labro, antennis pedibusque rufopiceis; thorace subcylindrico, sat remote, mediocriter punctato; elytris tenuiter punctatis, interspatiis ante medium transversim rugulosis. Long. 3 lin.

Hab. Western Australia.

Body densely clothed with adpressed scales. Head exerted, broad, distinctly but not strongly punctured, surface closely covered with long, white, adpressed scales; clypeus broader than long, sides converging towards the apex, the apical border obsolete; eyes large, remote, prominent, subrotundate, their inner border slightly sinuate; antennæ not half the length of the body, slender; jaws black. Thorax nearly twice as broad as long; sides nearly parallel behind the middle, slightly converging in front; above subcylindrical, subremotely punctured, densely clothed with adpressed scales, a longitudinal space down the centre of the disk, and another, less defined, on either side, nearly glabrous. Scutellum much broader than long, its sides diverging from the base towards the apex, the latter broadly and obtusely rounded. Elytra scarcely broader than the thorax, their sides parallel, their apices conjointly, subacutely rounded; above subcylindrical, irregularly punctured; interspaces on the anterior disk transversely rugulose; surface closely covered with white and pale fuscous scales, arranged in broad, ill-defined vittæ, leaving on each elytron three or four nearly glabrous longitudinal spaces.

TERILLUS VITTATUS. Elongatus, convexus, cupreus, nitidus, pube subdepressâ grisâ vestitus; antennis, tibiis tarsisque piceis; thorace rugoso-punctato, utrinque excavato, disci medio maculâ trifidâ, et ante medium serie transversâ punctorum nitidorum instructo; elytris rude punctatis, utrinque infra basin fovea magna excavatis, interspatiis transversim elevato-strigosis, vittis nonnullis interruptis, prope apicem magis elevatis, instructis. Long. $2\frac{1}{2}$ lin.

Hab. Queensland, Rockhampton.

Head rugose-punctate, clothed with long, subdepressed, silky hairs; clypeus wedge-shaped, less closely punctured than the

upper part of the face; eyes prominent, subrotundate, distinctly notched; antennæ half the length of the body, filiform, six lower joints pale piceous, the five outer ones nigro-piceous. Thorax about one half broader than long; sides rounded, converging in front; above convex, coarsely punctured, rugose, impressed on either side with a large deep fovea; on the middle of the disk is a slightly raised, ill-defined, smooth and shining trifid patch, and in front of this are six small, shining, impunctate spots, arranged in a transverse curve. Scutellum broader than long, its apex broadly rounded, its surface glabrous, finely but not closely punctured. Elytra broader than the thorax, oblong, attenuated at the apex, the latter conjointly subangulate; above convex, coarsely and closely punctured; interspaces irregularly thickened, transversely strigose on the anterior disk; on each elytron are four or five raised, smooth and shining vittæ, only slightly elevated and ill-defined on the anterior disk, interrupted towards the apex and forming short, strongly-raised ridges; on each elytron below the basilar space is a large deeply-excavated fovea.

Genus *GEOPTERA*, *Baly*.

GEOPTERA IGNEO-NITENS. Oblonga, convexa, subtus picea, æneo-tincta; supra ænea, rufo-aureo tincta, antennis nigris, basi piceis; thorace crasse, irregulariter punctato, lateribus tridentatis; elytris sat profunde confuse punctatis, punctis ad apicem minus fortiter impressis; interspatiis transversim rugosis, apicem versus magis elevatis et longitudinaliter subcostatis. Long. $3\frac{3}{4}$ -5 lin.

Hab. Western Australia.

Head cupreo-igneous, rugose-punctate, front impressed with a fine longitudinal groove; clypeus wedge-shaped, well defined, its surface less closely and less coarsely punctured than the rest of the head; antennæ equal to the body in length in the male, shorter in the female, filiform, not thickened towards the apex, third and fourth joints each twice the length of the second, equal; four lower joints piceous, the rest black. Thorax more than twice as broad as long; sides rounded, tridentate, the anterior border narrowly, the hinder one broadly margined; above convex, coarsely and irregularly punctured, the punctures less crowded on the disk; whole surface deeply tinted with coppery red. Scutellum semioblong-ovate. Elytra broadly oblong, much broader than the thorax, coarsely and irregularly punctured, the punctures

towards the apex finer and much less strongly impressed; interspaces transversely wrinkled, more strongly thickened near the apex, and there forming raised longitudinal rows.

GEOPTERA VESTITA. Ovata, valde convexa, picea, nitida, pube adpressa grisea vestita, pedibus antennisque pallidis harum articulo ultimo nigro; thorace transverso, inde punctato, lateribus tridentatis; elytris crasse punctatis, punctis ad apicem striatim dispositis, interstitiis subcostatis. Long. 3 lin.

Hab. Port Bowen.

Head closely and coarsely punctured; front concave between the eyes; clypeus trigonate; antennæ slender, three fourths the length of the body, third joint three times the length of the second, the eleventh joint black. Thorax twice as broad as long; sides rounded, armed with three stout acute teeth; above transversely convex, coarsely punctured. Elytra much broader than the thorax, convex, coarsely punctured, the punctures towards the apex arranged in longitudinal rows; interspaces between these rows subcostate; on the anterior disk are also several slightly raised costæ.

Genus RHYPARIDA, *Baly.*

RHYPARIDA MACULICOLLIS. Oblongo-ovata, convexa, piceo-nigra, nitida, supra rufo-castanea, antennis (basi excepta), thoracis maculis duabus, transversim positis, elytrorumque plaga magna communi a basi fere ad apicem extensa, postice attenuata, nigra. Long. $2\frac{2}{3}$ lin.

Hab. Queensland, Rockhampton.

Clypeus coarsely punctured, not distinctly separated from the face, its anterior border deeply concave-emarginate; vertex nearly impunctate; front faintly impressed with a longitudinal groove; antennæ with the three lower joints rufo-fulvous, the fourth piceous, the rest black; third joint one third longer than the second. Thorax nearly twice as broad as long; sides rounded, converging in front; anterior angles armed with a small obtuse tooth; above convex, smooth and shining, remotely impressed with minute punctures, only visible under a lens; placed transversely on the disk, but rather nearer the anterior border than the base, are two large black patches. Scutellum semirovate-ovate, piceous. Elytra broader than the thorax, oblong, convex, faintly excavated below the basilar space, regularly punctate-striate, the punctures coarser and more deeply

impressed on the anterior disk, finer behind the middle; interspaces plane, very remotely impressed with minute punctures, only seen under a lens. Body beneath shining nigro-piceous, the claws pale piceous. Hinder thighs armed beneath with a minute tooth.

Family CHRYSOMELIDÆ.

Genus CYCLONODA.

Corpus late ovato-rotundatum, valde convexum, apterum. *Caput* in thoracem insertum; *oculis* angustatis, elongatis, remotis; *antennis* corporis dimidio brevioribus, ad apicem vix incrassatis; *clypeo* ♂ profunde et oblique incisa, ♀ semper transversim truncato; *palporum* maxillarium articulo ultimo ovato. *Thorax* transversus. *Scutellum* trigonatum. *Elytra* convexa, regulariter punctato-striata, lateribus ante medium modice lobatis, limbo inflexo horizontali, plano. *Pedes* robusti; *unguiculis* inermibus. *Prosternum* canaliculatum, antice in processum obtusum breviter productum; *acetabulis* anticis apertis.

Type *Cyclonoda pilula*, Clark (*Chalcomela*).

The present genus is separated from *Chalcomela* by its apterous body, closely united elytra, and by the distant, narrow, and elongate eyes. The males are distinguished by the remarkable forms of the clypeus: in *C. pilula* and *subpunctata* of Clark (the only species in which the male is known to me) the anterior border of the clypeus is obliquely incised by a broad angular notch, commencing close to the insertion of the right antenna, and extending more than halfway across the segment; the lower margin of the notch is developed into an obtuse lobe, thickened at the base, and produced obliquely forward, concealing (when viewed from above) the greater portion of the labrum.

Genus PARALEPTA.

Corpus elongatum, parallelum, convexum. *Caput* exsertum; *oculis* remotis, prominulis, elongato-ovalibus; *antennis* filiformibus, corporis dimidio æqualibus; *palpis* maxillaribus articulo ultimo trigonato, apice late truncato. *Thorax* transversus, lateribus irregulariter crenulatis. *Scutellum* trigonatum. *Elytra* thoraci æquilata, parallela, confuse striatim punctata. *Pedes* mediocres; *unguiculis* acute appendiculatis. *Prosternum* mesosterno æquilatum, apice vix ampliatus, dorso canaliculatum; *aceta-*

bulis anticis apertis. *Mesosternum transversum*. *Metasternum* apice immarginato, lateribus linea impressa instructis.

Type *Paralepta foveicollis*.

This genus is intermediate between *Calomela*, Hope (*Australica*, Chev.), and *Carystea*, mihi: in the toothed claw it agrees with the former; in the narrow elongate form and in the emarginate apex of the metasternum with the latter; it differs from both in the crenulate lateral border of the thorax.

PARALEPTA FOVEICOLLIS. Elongata, parallela, subcylindrica, nitida, subtus obscure nigro-ænea; supra obscure viridi-ænea, cupreo-violaceo nitens, antennis (basi piceo excepto) nigris; thorace modice convexo, ad latera dense, disco minus crebre, foveolato-punctato, interspatiis rude elevato-reticulatis; lateribus irregulariter sed leviter crenulatis; elytris sat crebre striatim punctatis, interspatiis leviter rugulosis, ad apicem leviter vittatis. Long. 4-5 lin.

Hab. New South Wales.

Head closely rugose-punctate; antennæ slender, four lower joints obscure piceous, the rest black. Thorax twice as broad as long; sides straight and nearly parallel from their base to beyond the middle, thence rounded and converging to the apex, the anterior angle slightly produced, acute; lateral margin irregularly crenulate*; upper surface moderately convex, closely covered on the sides, more distantly so on the middle disk, with large, deep, foveolate punctures; interspaces nitidous, elevate-reticulate; disk with several distinctly raised, irregular, impunctate patches. Elytra scarcely broader than the thorax, parallel; above convex, very slightly excavated below the base, aciculate-punctate, the punctures closely arranged in longitudinal rows, those on the inner disk geminate; interspaces rugulose, transversely strigose before the middle, elevated into faint vittæ towards the apex.

Family GALLERUCIDÆ.

Subfamily HALTICINÆ.

Genus PLATYCEPHA.

Corpus elongato-ovatum, convexum. *Caput* subtrigonatum, inter oculos planum; *antennis* ad caput cum thorace vix æqui-

* These crenulations vary in degree, and are occasionally almost entirely wanting.

longis, extrorsum paulo incrassatis, articulis 8°-10° subturnatis, ultimo rotundato-ovato; *oculis* remotis, ovalibus, integris; *carina* et *encarpis* obsoletis. *Thorax* transversus, transversim convexus. *Elytra* anguste oblongis, parallelis, thorace vix latiora, modice convexa, punctato-striata. *Pedes* breves, robusti; *coxis* anticis prosterno æquialtis; *femoribus* anticis quatuor modice, posticis valde incrassatis; *tibiis* a basi ad apicem incrassatis, apice spina acuta armatis; dorso profunde canaliculatis, sulci marginibus vix ante apicem dente acuto armatis. *Tarsis* posticis apici tibiarum insertis; *unguiculis* appendiculatis. *Prosternum* planum, apice dilatatum; *acetabulis* anticis integris.

The extremely short antennæ, the short robust legs, the flattened face between the eyes, together with the absence of any thoracic grooves, will separate *Platycephæ* from any allied genus.

PLATYCEPHA EXIMIA. Elongato-ovata, convexa, flava, nitida, scutello, antennis extrorsum femoribusque posticis apice fusco-piceis; capite (antennis exceptis) pallide rufo-piceo; thorace fulvo, tenuiter punctato; elytris nigris, margine laterali ante medium anguste rufo; sat fortiter punctato-striatis, interspatiis planis, leviter ruguloso-punctatis.

Var. A. elytris fusco-piceis, margine externo late flavo. Long. 2 lin.

Hab. Western Australia, Nichol Bay.

Head smooth, nearly free from punctures; surface flat, *carina* and *encarpæ* entirely obsolete, the interocular spaces being only indicated by a faint line on the upper margin; labrum flavous; antennæ with the six lower joints flavous, the rest fuscous; basal joint moderately, the second slightly thickened, second and five following joints nearly equal in length, the fifth to the seventh gradually increasing in width, slightly flattened, trigonate, the eighth to the tenth very slightly compressed, subturnate, the eleventh rotundate-ovate; eyes remote, shining black. *Thorax* nearly twice as broad at the base as long; sides rounded and diverging at the extreme base, thence obliquely converging to the apex, anterior angles slightly produced, very obtuse, the hinder ones nearly obsolete; upper surface minutely and distinctly punctured, the puncturing only visible under a lens. *Scutellum* broader than long, its apex broadly rounded. *Elytra* oblong, moderately convex, distinctly punctate-striate, interspaces finely

rugulose and finely punctured. Tibiæ stout, increasing in thickness from base to apex, their outer surfaces broadly grooved, margins of the groove in the four hinder tibiæ each armed just before the apex with an acute tooth; outer border of the groove on the front pair armed with a similar tooth; hinder tibia equal in length to the femur.

Genus ARSIPODA, *Erichs.*

ARSIPODA PICEIPES. Elongato-ovata, convexa, cuprea, nitida, pedibus piceis; antennis corporis dimidio vix brevioribus, ad apicem incrassatis, nigris, basi piceis; thorace crebre punctato, basi utrinque sulco brevi perpendiculari impresso; elytris tenuiter punctato-striatis, interspatiis planis, tenuissime punctatis. Long. 2 lin.

Hab. Western Australia (*Duboulay*).

Head trigonate, rugose; carina slightly raised, ill-defined, acuminate at base and apex; encarpæ ill-defined, transverse, not contiguous; front impressed on either side with a deep groove, which runs obliquely upwards along the inner border of the eye; antennæ nearly half the length of the body, six outer joints thickened and forming an indistinct elongated club; six lower joints piceous, the rest black. Thorax rather more than twice as broad as long at the base; sides straight and parallel behind the middle, thence rounded and converging to the apex, anterior angles oblique, thickened, obtuse; basal margin faintly sinuate on either side the median lobe, the latter scarcely produced, broadly truncate; upper surface rather strongly and somewhat closely punctured; base impressed on either side, at some distance from the lateral margin, with a deep, slightly curved, perpendicular groove; in the middle between these grooves is a faint indication of a transverse groove. Scutellum trigonate. Elytra rather broader than the thorax, ovate, attenuated towards the apex, convex, finely punctate-striate, the punctures rather stronger on the basal half of the surface; interspaces plane, minutely but not closely punctured. Legs piceous; hinder thighs moderately curved, lower half of upper surface only slightly grooved.

Very similar in form to *A. consuta*, Germ.: more robust and less elongate than that insect, the antennæ shorter and much more incrassated towards their apices.

Genus *ÆDIONYCHIS*, *Latr.*

ÆDIONYCHIS HOWITTI. Ovata, convexa, nitida, subtus picea, pectore abdomineque piceo-fulvis; supra nigra, elytris metallico-purpureis. Long. 2 lin.

Hab. New South Wales, Sydney.

Head short; carina plane, its surface impressed with a faint longitudinal groove; clypeus abruptly inflexed, shortly semi-lunate, its surface concave; encarpæ contiguous; antennæ moderately robust, much less than half the length of the body. Thorax nearly three times as broad as long; sides reflexed, converging and slightly rounded from base to apex, the hinder angles acute, the anterior curved slightly outwards and forming an obtuse tooth; disk smooth, impunctate. Elytra broader than the thorax, very finely but not closely punctured; interspaces smooth and shining, faintly wrinkled below the base; reflexed lateral margin narrow, impressed with a single row of coarse punctures. Hinder tibia short, its outer surface armed just before the apex with a short tooth; basal joint of hinder tarsus shorter than the two following united, claw strongly inflated.

Genus *SPHÆOPHYMA*.

Corpus rotundatum, valde convexum. *Caput* parvum, thoraci ad oculos insertum; *oculis* magnis, elongatis, intus leviter sinuatis; *antennis* proxime insertis, thorace paulo longioribus, filiformibus, modice robustis; articulo basali elongato, paulo incrassato, leviter curvato, secundo brevi, ovato; *encarpis* subtrigonatis, contiguis; *carina* lineariformi. *Thorax* transversus. *Scutellum* parvum. *Elytra* thorace multo latiora, punctato-striata, limbo inflexo dilatato, margine exteriori deorsum producto. *Pedes* breves; *coxis* anticis prosterno æquialtis; *femoribus* posticis valde incrassatis; *tibiis* anticis quatuor apice muticis; *tibiis* posticis crassis, paulo recurvatis, apice in processum acutum prolongatis, dorso plano, ante apicem spina valida subclaviformi, apice subacuta, armato; *tarsis* posticis tibiarum dorso, vix ante apicem, insertis, articulo basali cæteris longiore; *unguiculis* appendiculatis. *Prosternum* planum, postice ad metasternum productum, *acetabulis* anticis integris. *Mesosternum* occultum.

Sphærophyma, which I have established on a remarkable insect collected at Rockhampton by Mr. Simon, is nearly allied to *Argopistes*, Motsch.: it may be known from that genus by the punctate-striate elytra.

SPHÆROPHYMA SIMONI. Rotundata, valde convexa, flava, nitida, oculis nigris, femoribus posticis piceis; thorace sat crebre tenuiter punctato; elytris tenuiter punctato-striatis, punctis in striis confuse dispositis, interspatiis planis. Long. $1\frac{1}{2}$ lin.

Hab. Queensland, Rockhampton.

Eyes large, black, occupying a considerable portion of the face; antennæ nearly contiguous at their insertion, being only separated by the linear carina, which extends downwards across the large triangular clypeus, and nearly reaches the anterior border of the latter; encarpæ slightly raised, ill-defined. Thorax nearly three times as broad as long; sides very obliquely converging from base to apex, anterior angles thickened, slightly produced, very obtuse, hinder angles rounded; basal margin oblique and bisinuate on either side, the median lobe slightly produced, broadly and obtusely rounded; surface rather closely but finely punctured. Elytra much broader than the thorax, the shoulders broadly rounded; upper surface very finely punctate-striate, the punctures (in some specimens) piceous; interspaces plane, impressed with punctures equal in size to those on the striæ themselves; outer margin broadly dilated, irregularly punctured.

This insect, like the species belonging to Motschulsky's genus *Argopistes*, has quite the facies of a *Coccinella*.

Observations on British Polyzoa. By CHARLES WILLIAM PEACH, Esq., A.L.S. &c.

[Read June 7, 1877.]

(PLATE XXIII.)

SCRUPOCELLARIA scruposa.—Although this is common and well known, I am able to add a little to its history. On the 10th of June, 1876, I got a nice specimen at Newhaven, on a sponge (*Halichondria panicea*) from the Firth of Forth. From a desire to know how it moored itself to this soft body, I carefully examined it, and cut open the sponge, and found, as I thought, curious sponge-spicules, differing from all I had previously seen. On tearing the *Scrupocellaria* from the sponge, I at once saw what I took for spicules were actually the "tubulous root-fibres" of the *Scrupocellaria*; here, then, was a new fact to me. Hitherto I had always considered these "tubulous root-fibres" as smooth, with a disk, for adhesion to